

## ABSTRACT OF THE DISCLOSURE

In the process for producing an oxidized polysaccharide derivative of the present invention, a polysaccharide is pretreated to enhance its water solubility and then a primary alcohol group of the pretreated polysaccharide is selectively oxidized into a carboxyl group by hypochlorous acid or its salt in the presence of a nitroxyl compound. With such a process, a sufficient number of carboxyl groups can be introduced into the polysaccharide without preventing the cleavage of molecular chain, thereby producing the oxidized polysaccharide derivative having an improved water absorption. In the process for producing an oxidized polyglycosamine derivative of the present invention, a polyglycosamine is pretreated to enhance its water solubility and then a primary alcohol group of the pretreated polyglycosamine is selectively oxidized into a carboxyl group by hypochlorous acid or its salt in the presence of a nitroxyl compound. With such a process, a sufficient number of carboxyl groups can be introduced into the polyglycosamine without preventing the cleavage of molecular chain, thereby producing the oxidized polyglycosamine derivative having properties comparable to those of naturally occurring mucopolysaccharide.